

as I could. When I had passed this ligature, I tied it firmly, and then proceeded to tie the upper ligature, which had also been applied as close as possible to the swelling. So soon as the upper ligature was tightened, all pulsation and sound ceased, and the appearance of tumour was almost effaced. The long wound was then closed by points of suture, a slip of dry lint placed over it, and retained by slips of adhesive plaster; the foot, leg, and knee were wrapped in cotton wadding, and the patient placed in bed, with the knee very slightly bent, and laid on its outside on a soft pillow.

When he recovered from the chloroform he was a little sick, and vomited. An opiate was administered. The milk and farinaceous diet was ordered to be continued. The patient progressed very favourably, and required little treatment, except medicine and enemata to act on the bowels, which were very constipated, so as to prevent straining at stool, and the wound healed well. No marked alteration in the temperature of the limb occurred after the first two days. On the twelfth day after the operation, the lower ligature came away when I was dressing the wound, and without any appearance of blood. Slightly stimulating lotions were used to wash the points of the wound which had not cicatrized, and support was given by strips of adhesive plaster. On the 26th four drachms of blood came away from the incision after straining at stool. Dr. Dunsmure, who visited him, enjoined quiet, cold to the wound, and, as his tongue was loaded, ordered him blue and compound rhubarb pill; and subsequently better diet, claret wine and iron. On the 11th May, Mr. S. found the patient looking very well, the wound healed, except at the ligature, which I found was lying loose, and therefore removed it. From this time nothing worthy of record occurred. He was allowed to walk at first with a crutch, and subsequently to use the limb. He was lame for some time owing to the stiffness of the knee, but this gradually disappeared, and he now uses the leg perfectly. For some time after the operation I directed him to use a flannel roller to support the venous circulation in the limb. The cicatrix was narrow and firm; not the slightest pulsation or bruit to be felt or heard, no appreciable venous congestion, and his general health excellent.

To-day (10th June, 1869) I examined Mr. K——. As already stated, the aneurism is thoroughly cured; not the slightest pulsation or thrill can be felt; but the appearance of the limb indicates some obstruction or alteration in the venous circulation of the part. The right thigh is greater in circumference by one inch than the left. The swelling is neither tense nor œdematous, but soft and elastic. The cicatrix is thinner and broader than it was eight months ago; whilst towards the groin numerous small superficial veins are seen dilated and slightly dilated and slightly tortuous; but the common femoral and great saphena veins, which were distended and varicose before the operation, seem now of their normal size.

39. *Extirpation of the Parotid Gland for Cancer.*—Prof. OTTO WEBER relates (*Deutsche Klinik*, 1867) three cases in which he extirpated, as he believes, the entire parotid gland in cancer of that organ; and he appends some observations on the practicability and advisability of the operation. He differs equally with Allan Burns and Hyrtl, who teach that it is anatomically impossible to remove the whole gland, and with Busch, who teaches that extensive degenerations of the parotid are best left alone. He believes, on the contrary, that if the operation be properly performed, the bleeding is more easily commanded than in many operations of the neck; and although the *facial nerve must be divided, and paralysis of that side of the face ensue*, this is, in his opinion, only a trifling drawback if, as he believes, cancer may be extirpated, and a complete cure obtained. He thinks there need be little primary bleeding, if the vessels are secured as they are divided or exposed with two ligatures, one on either side; and that there will be no risk of secondary hemorrhage. In the operation he directs that the parotid should be laid bare by an incision parallel to the ascending ramus of the lower jaw, to be crossed, if necessary, by another incision. The external carotid may be tied and divided as it passes into the gland at an early period of the operation, if it can be seen; but he does not consider this necessary, nor will the ligature of this artery stop the hemor-

rhage from its branches. Ligature of the common carotid he dissuades as useless and dangerous. The proper fascia of the parotid is not to be divided if the whole gland is to be extirpated, nor should sharp hooks be inserted into it, since they easily tear this capsule. "In exposing the parotid we come first to the temporal artery below the zygoma, the anterior auricular in front of the meatus, and the transverse facial close beneath the articular condyle. It is better to expose all these vessels freely enough to be able to pass a double ligature around them with an aneurism needle before dividing them. At the under and posterior part the sterno-cleido-mastoid muscle comes into the way. If this is adherent, a part may be removed with the tumour. . . . Posterior to the parotid in cancerous tumours the occipital and posterior auricular artery and the auricularis magnus nerve usually require division—the latter may sometimes be spared. Having now got the tumour free on all sides, the operator seeks for the external carotid artery. In cancer I always advise to remove the gland as completely as possible. Hence it is necessary to divide the external carotid and the temporo-maxillary vein. These also are to be cut between two ligatures; the parotid is then to be freed and lifted from its bed with the finger, in doing which some force is occasionally necessary, but too much force should not be used, otherwise the joint or the carotid, if it has not yet been divided, may be torn into, in consequence of the closeness of the cellular connections. Before the parotid can be completely severed from the styloid process and the pharyngeal muscles, the internal maxillary and ascending pharyngeal arteries have to be divided. They will bleed even if the external carotid is secured, and therefore must be ligatured. The remains of the gland are then to be dissected with knife and scissors clean off the fascia covering the internal carotid artery and internal jugular vein. It is occasionally necessary to follow the tumour to the inside of the ramus of the jaw, as it spreads to the submaxillary gland, and in some unfavourable cases the latter is also affected. Here, also, the extraction of the gland with the finger is serviceable, and in such cases the facial and lingual arteries must also be tied. From twelve to sixteen ligatures are generally necessary, but the free use of the ligature spares blood and enables the operator to have a good view of the parts."

Three cases are given; in the first, the whole parotid having been extirpated, great deformity resulted from the drawing of the features. This was temporarily relieved by division of muscles on the other side. It is noticed that "trophic" inflammation of the eye followed on the division of the nerve, as it does on that of the trifacial, attributed to the dropping of the lower lid. The operation was performed in February. In October there was the commencement of return of the disease, when the account breaks off.

In the second case the tumour was very extensive, and in dissecting it out the pneumogastric nerve was exposed, but not injured. The joint was opened to a slight extent, the ninth nerve exposed, and the whole of the posterior edge of the jaw. The operation lasted one hour and a half. The patient was extremely weak and emaciated before the operation. He recovered, however, and derived much relief from it; but some swelling was noticed during the healing of the wound in the opposite parotid, and he died (not under Prof. Weber's observation) four months after the operation.

In the third case the tumour had been brought to ulceration by the repeated application of caustic before the patient was seen. In this case the tumour was of great size, involving the submaxillary gland and some of the lymphatic glands of the neck. The submaxillary gland was completely extirpated, the muscles arising from the styloid process removed in part, the transverse process of the atlas was completely exposed in the wound, the facial nerve divided, and the hypoglossal exposed, but the vagus was not seen. Twelve arteries and the temporo-maxillary vein were tied. The patient recovered completely, and was well as long as heard of, though much disfigured by the facial paralysis.

The paper concludes with a description of the malignant tumour in each of the above cases; and, as a contrast, the history is given of a non-malignant tumour extirpated from the parotid region, and commencing apparently in disease of one of the lymphatic glands which are found imbedded in the parotid.—*Syd. Soc. Bienn. Retrospect*. 1869.